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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,852	10/14/2004	Barbara Wagner	HU/5-22660/A/PCT	4838
324	7590	07/09/2008		
JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			EXAMINER HAYLIN, ROBERT H	
			ART UNIT	PAPER NUMBER
			1626	
			NOTIFICATION DATE	DELIVERY MODE
			07/09/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

joann.villamizar@ciba.com

Office Action Summary

Application No.

10/511,852

Applicant(s)

WAGNER ET AL

Examiner

ROBERT HAVLIN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 14 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13, 14 and 16 is/are rejected.
- 7) ☒ Claim(s) 13, 14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the claims: Claims 13, 14, and 16 are currently pending.

Election/Restriction: Application previously elected group III (claims 13-16, products of formula 1) and the species of compound 19 on page 44 of the specification.

RCE: A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/8/08 has been entered.

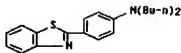
RESPONSE TO APPLICANT ARGUMENTS

1. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwilmeyer (US 2,715,629) in view of Degen et al. (US 4,002,733) and Fablan (Chem. Rev. 1992, p. 1205).

Applicant argues in (1.) that the Zwilmeyer (US 2,715,629) "teaches benzothiazole derivatives which are different when compared to the benzothiazoles compounds of the present invention." Applicant also points out that Zwilmeyer teaches alkyl groups not more than 4 atoms at the position of difference between the prior art and the claims.

Although applicant compares instant example 3 and example 1 of Zwilmeyer, as was shown in the office action of 6/6/2007 the more relevant species in the prior art was

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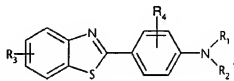


example 7 with the following structure:

. In addition, applicant

previously amended claim 13 to add the limitation of R2 as C6-C12alkyl while claims 16

allows for R1' and R2' to be C1-C22alkyl and C5-C22alkyl respectively. Thus the



instant claims still read on formula 1 of

, where R3 and

R4 are hydrogen; R1 is C1-C22 alkyl; R2 is C6-C12alkyl (or C5-C22alkyl in claim 16).

However, because Zwiglmeier requires a sulfonic acid derivative and this is not part of the instant claims, **this rejection is withdrawn.**

NEW REJECTIONS

Claim Rejections - 35 USC § 103

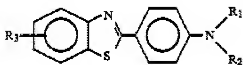
- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 13, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scheler (US 4,540,648) in view of Miglarese (US 2,334,348), Hansen et al. (US 5,667,765) and Wolf et al. (Clinics in Dermatology, (2001), Volume 19, Issue 4, Pages 452-459).

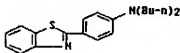
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Scheler teaches a genus of UV absorbing compounds of the formula:



where R1 is H, alkyl, or aralkyl; R2 is H or

optionally substituted alkyl, etc.; and R3 is H or alkyl. The reference also teaches the

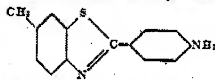


specific compound of

as a UV absorbing compound.

Migliarese teaches sunburn preventive compounds and specifically the following compound:

**2-(para amino phenyl) 6-methyl benzthiazole
(commonly called dehydrothio-para-toluidine)**



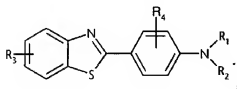
The benzthiazole is the luminophore. Here there are two auxochromes, the 2-phenyl and the para-amino groups. The phenyl gives only a weak fluorescence, the para-amino gives a much stronger fluorescence and gives the compound an affinity for skin and hair.

Hansenne teaches the desirability of utilizing a lipophilic UV absorbing sunscreen compound by taking advantage of the physicochemical properties of the compound.

Wolf teaches the success of modifying the sunscreen PABA by adding long-chain aliphatic groups (C8 and longer) to create a superior product.

Differences between the prior art and the claims

Thus the instant claims still read on formula 1 of



, where R₃ and R₄ are hydrogen; R₁ is C₁-C₂₂ alkyl; R₂ is C₆-C₁₂alkyl (or C₅-C₂₂alkyl in claim 16). Therefore the only difference between the teaching of Scheler and the instant claims is the addition of one (claim 16) or two (claims 13 and 14) methylene groups at the R₂ position.

Finding of prima facie obviousness

Upon reading the teachings of Scheler, one of ordinary skill in the art would immediately recognize the UV absorbing compounds utility in cosmetics. Furthermore, one of ordinary skill in the art would be motivated by the teachings of Miglarese to evaluate the compounds of Scheler for use as a sunscreen. Miglarese also suggests that the amino group provides affinity for the skin, which would be refined by the teachings of Hansenne and Wolf regarding how to modify UV absorbing compounds to add lipophilic groups such as C₈ and longer aliphatic groups. In addition, the Scheler compound is a homolog of the instant claims, only differing by successive addition of -CH₂- group, thus one of ordinary skill in the art would expect the physical properties of the two compounds to be similar.

This is further supported by caselaw and the MPEP in section 2144.09(II):

Compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH₂- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. In re Wilder, 563 F.2d 457, 195

USPQ 426 (CCPA 1977); see also *In re May*, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978).

Therefore, because the reference teaches homologs of the instantly claimed compounds and the MPEP states that homologs are presumed to possess similar properties, it would have been obvious to one of ordinary skill in the art to modify the alkyl chain length and arrive at the instant invention.

One of ordinary skill in the art would have been guided by the prior art to make the invention as claimed because Scheler teaches the desired UV properties of a base compound supported by Miglarese, while Hansenne and Wolf teach how to modify the compound to arrive at the instant invention. Therefore, the claims are obvious.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 13, 14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 13, 14, and 16 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the reply filed 4/2/2007. In that paper, applicant has stated:

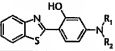
Claims 1-16 are subject to restriction as set forth in the Office Action. Responsive thereto, the election of Group III (claims 13-16, drawn to a product of Formula 1) is made. Furthermore, as a single species, the Applicants elect compound (19), which is disclosed on page 44 of the specification.

and this statement indicates that the invention is different from what is defined in the claim(s) because compound 19 is NOT encompassed by the current claims.

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Specifically, compound 19 as described in the election is (as copied from the specification):

The following compounds may be prepared by this method:

General formula			
			
Comp. of formula	R ₁	R ₂	
(19)	H	H	$\lambda_{\text{max}}(\text{EtOH}) = 358 \text{ nm}$; $\epsilon = 39,095$; E (1%, 1 cm) = 1813

Therefore, because the definition of R2 was amended to exclude hydrogen, the claims currently do not read on the elected species.

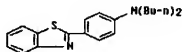
Claim Objections

In accordance with the election of species practice, because no generic claim was allowable, the claims are restricted to the elected species and the remaining subject matter held withdrawn.

The pending claims are objected for reading on non-elected subject matter as a result of the restriction to the elected species ONLY.

Conclusion

No claim is in condition for allowance. The examiner would also like to make the following reference part of the record: Petkov et al., Dyes and Pigments, (1997) Vol. 35,



No. 2, pp. 171-81, as it also teaches the compound

as well as

other derivatives of the same core structure as the instant application.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT HAVLIN whose telephone number is (571)272-9066. The examiner can normally be reached on Mon. - Fri., 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor, Joe McKane can be reached at (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Havlin/
Examiner, Art Unit 1626

/Kamal A Saeed, Ph.D./
Primary Examiner, Art Unit 1626